

## **IN THE CLAIMS**

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 2 in accordance with the following:

1. (CANCELLED)
2. (CURRENTLY AMENDED) A genetic motif extracting and processing apparatus comprising:
  - gene arrangement information storing means for storing gene arrangement information;
  - gene arrangement information inputting means for inputting at least one piece of gene arrangement information;
  - motif extraction range designating means for an operator interactively designating on a display screen a motif extraction range in the input gene arrangement information; ~~and~~
  - motif extracting means for extracting a genetic motif within the designated extraction range from the input gene arrangement information;
  - gene arrangement information retrieving means for retrieving, based on the motif extracted from the input gene arrangement information, gene arrangement information including the extracted motif, from said gene arrangement information storing means; and
  - gene arrangement information adding means for adding the retrieved extracted-motif-based gene arrangement information to the input gene arrangement information.
3. (PREVIOUSLY PRESENTED) A genetic motif extracting and processing apparatus according to claim 2, further comprising gene arrangement information editing means for editing the gene arrangement information.
4. (PREVIOUSLY PRESENTED) A genetic motif extracting and processing apparatus according to claim 2, further comprising motif editing means for editing the motif extracted by the motif extracting means.

5. (PREVIOUSLY PRESENTED) A genetic motif extracting and processing apparatus according to claim 2, further comprising alignment means for alignment-processing a plurality of gene arrangement information input by the gene arrangement information inputting means.

6. (PREVIOUSLY PRESENTED) A genetic motif extracting and processing apparatus according to claim 2, further comprising:  
motif storing means for storing motifs; and  
motif registering means for registering the motif extracted by the motif extracting means into said motif storing means.

7. (ORIGINAL) A genetic motif extracting and processing apparatus according to claim 6, further comprising motif displaying means for displaying at least one motif from those motifs registered in the motif storing means.

8. (PREVIOUSLY PRESENTED) A genetic motif extracting and processing method comprising:  
inputting at least one piece of gene arrangement information;  
designating interactively on a display screen a motif extraction range in the input gene arrangement information;  
extracting a genetic motif within the designated motif extraction range from the input gene arrangement information;  
retrieving, based on the motif extracted from the input gene arrangement information, gene arrangement information including the extracted motif, from a gene arrangement information database; and  
adding the retrieved extracted-motif-based gene arrangement information to the input gene arrangement information.

9. (PREVIOUSLY PRESENTED) A recording medium recorded with a genetic motif extracting and processing program realizing a process of:

inputting at least one piece of gene arrangement information;

designating interactively on a display screen a motif extraction range in the input gene arrangement information;

extracting a genetic motif within the designated motif extraction range from the input gene arrangement information;

retrieving, based on the motif extracted from the input gene arrangement information, gene arrangement information including the extracted motif, from a gene arrangement information database; and

adding the retrieved extracted-motif-based gene arrangement information to the input gene arrangement information.